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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,530	11/13/2003	Andrew Thomas Forsberg	47563.0014	9304
57600 7590 03/25/2010 HOLLAND & HART LLP 60 E. South Temple, Suite 2000 P.O. Box 11583 Salt Lake City, UT 84110				
EXAMINER				
COLELLO, ERIN L				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/713,530

Applicant(s)

FORSBERG ET AL.

Examiner

ERIN COLELLO

Art Unit

3734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 5, 7, 13-16, 20-22, 24, 25, 28, 33-39, 45-49, 51-54 and 57-60 is/are pending in the application.
- 4a) Of the above claim(s) 4, 5, 7, 12, 22, 24, 25 and 33-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 13-16, 20-21, 28, 45-49, 51-54, 57-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Receipt is acknowledged of applicant's amendment filed January 6, 2010.

Claims 1, 4-5, 7, 12-16, 20-22, 24-25, 28, 33-39, 45-49, 51-54, 57-60 are pending and an action on the merits is as follows.

Applicant's arguments filed January 6, 2010 have been fully considered but they are not persuasive.

Claim Objections

1. Claim 20 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 includes the claim limitation that the second distal hole is offset longitudinally from the first distal hole. Claim 20 which is dependent on claim 1, claims that the first distal hole and the second distal hole are spaced apart from each other in a lengthwise direction.

Claim Rejections - 35 USC § 103

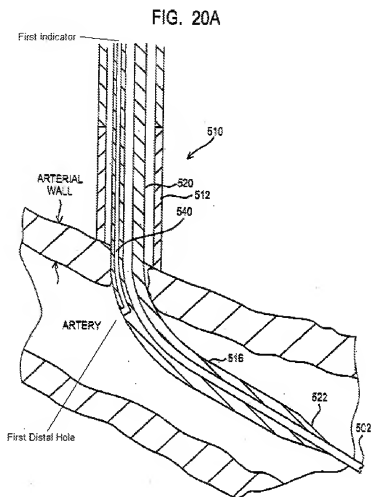
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims **1, 14-16, 20, 28, 45-49, 51-54 and 57-59**, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kanner et al. (US 6,767,356 B2)**.

Regarding claims 1, 20, 45, 47, 52, 57, 58 and 59, Kanner discloses a vascular insertion assembly, comprising: an insertion sheath having a distal end and a proximate end (Ref 512); a dilator having a distal end and a proximate end sized to fit inside the insertion sheath (Ref 520), the dilator having a distal end positionable distally beyond a distal end of the insertion sheath (Ref 516); a first distal hole located in the distal end of the dilator such that the first distal hole is positionable distally beyond the distal end of the insertion sheath, the first distal hole being open for fluid flow only after being positioned distally beyond the distal end of the insertion sheath; wherein the first distal hole is a first inlet port (Figure 20A see below; Figures 38, 39); a first indicator located at a proximal end of the dilator (Column 8, Lines 37-50; wherein the proximal end of the blood marking lumen is a first indicator that indicates the position of the insertion assembly to the user), the first indicator being in fluid communication with the first distal hole so that when the first distal hole (inlet port) penetrates a vessel, the first indicator (outlet port) at the proximal end indicated an initial penetration of the vascular insertion assembly into the vessel (Ref 540; wherein a lumen in the dilator provides the fluid communication that indicates to the user the depth; Column 8, Lines 37-50); a second distal hole located in the distal end of the insertion sheath (Column 8, lines 37-59; wherein the assembly can contain an additional passageway which would be similar to the first passageway and would include a distal hole similar to the one shown in Figure 20A below); the second distal hole being offset longitudinally in a proximal direction (Column 8, Lines 37-59; wherein the additional passageway is proximal to the first passage in order to indicate that the depth of the assembly is too far); wherein the

second distal hole is a second inlet port also known as an over insertion hole (Column 8, Lines 37-59; Column 18, Lines 60-67; Column 19, Lines 1-31); and a second indicator located at a proximal end of the insertion sheath; wherein the second indicator is a second proximal hole also known as an outlet port of an over insertion indicator (Column 8, lines 37-59; wherein the assembly can contain an additional passageway which would be similar to the first passageway and would include an indicator similar to the one shown in Figure 20A below; wherein the additional passageway can be in the dilator or the sheath) the second indicator being in fluid communication with the second distal hole so that when the second distal hole (inlet port) penetrates the vessel, fluid flows out of the second indicator at the proximal end and indicates that the vascular insertion assembly is at another depth in the vessel; wherein the second depth represents an over insertion of the vascular insertion assembly into the vessel (Column 8, Lines 37-60; Column 18, Lines 55-67; Column 19, Lines 1-31; wherein the additional passageway can be in the dilator or the sheath and would be similar to the first passageway connecting a distal hole and an indicator in order to indicate that the depth of the assembly is too far)



Kanner discloses all of the claimed limitations above but fails to explicitly disclose that the proximal end of the blood marking lumen is a hole or outlet port; where fluid can flow out.

However, in an alternate embodiment, Kanner teaches that the proximal end of a blood marking lumen in the sheath comprises a port for observing the presence of blood due to the proximal end entering a vessel (Column 18, Lines 55-65; Column 19, Lines 1-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the proximal end of the first blood marking lumen to include a hole or port as taught by Kanner in Figures 33 and 34, since such a modification provides an easy way for the user to observe the presence of blood and determine the position of the insertion instrument.

Kanner fails to explicitly disclose that the first distal hole and the second distal hole can be circumferentially spaced.

However, in an alternate embodiment, Kanner teaches that it is well known in the art to include a first passageway and a second passageway; wherein each passageway includes a distal hole and a proximal hole; wherein the first distal hole is circumferentially spaced from the second hole (Figures 33 and 34, (674), (675)).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the first and second passageways and therefore the first and second distal holes of Kanner to be circumferentially spaced from one another, since such a modification enhances the device by allowing the insertion of the device to be monitored at different locations.

Regarding claims 28, 46, 48-49, 53 and 54, Kanner discloses a vascular insertion assembly, comprising: an insertion sheath having a distal end and a proximate end (Ref 512); a dilator having a distal end and a proximate end sized to fit inside the insertion sheath (Ref 520), the dilator having a distal end positionable distally beyond a distal end of the insertion sheath (Ref 516); a first distal hole located in the distal end of the dilator such that the first distal hole is positionable distally beyond the distal end of

the insertion sheath, the first distal hole being open for fluid flow only after being positioned distally beyond the distal end of the insertion sheath; wherein the first distal hole is a first inlet port (Figure 20A see below; Figures 38, 39); a first indicator located at a proximal end of the dilator (Column 8, Lines 37-50; wherein the proximal end of the blood marking lumen is a first indicator that indicates the position of the insertion assembly to the user), the first indicator being in fluid communication with the first distal hole so that when the first distal hole (inlet port) penetrates a vessel, the first indicator (outlet port) at the proximal end indicated an initial penetration of the vascular insertion assembly into the vessel at a first depth (Ref 540; wherein a lumen in the dilator provides the fluid communication that indicates to the user the depth; Column 8, Lines 37-50); a second distal hole located in the distal end of the insertion sheath (Column 8, lines 37-59; wherein the assembly can contain an additional passageway which would be similar to the first passageway and would include a distal hole similar to the one shown in Figure 20A above); the second distal hole being offset longitudinally from the first distal hole (Column 8, Lines 37-59; wherein the additional passageway is proximal to the first passage in order to indicate that the depth of the assembly is too far); wherein the second distal hole is a second inlet port also known as an over insertion hole (Column 8, Lines 37-59; Column 18, Lines 60-67; Column 19, Lines 1-31); and a second indicator located at a proximal end of the insertion sheath; wherein the second indicator is a second proximal hole also known as an outlet port of an over insertion indicator (Column 8, lines 37-59; wherein the assembly can contain an additional passageway which would be similar to the first passageway and would include an

indicator similar to the one shown in Figure 20A above; wherein the additional passageway can be in the dilator or the sheath), the second indicator being in fluid communication with the second distal hole via a flow path defined by the insertion sheath, the flow path being positioned radially inward of an outer surface of the insertion sheath so that when the second distal hole (inlet port) penetrates the vessel, fluid flows out of the second indicator at the proximal end and indicates that the vascular insertion assembly is at another depth in the vessel; wherein the second depth represents an over insertion of the vascular insertion assembly into the vessel (Column 8, Lines 37-60; Column 18, Lines 55-67; Column 19, Lines 1-31; wherein the additional passageway can be in the dilator or the sheath; and would be similar to the first passageway connecting a distal hole and an indicator in order to indicate that the depth of the assembly is too far; wherein the first passageway is positioned radially inward of the outer surface).

Kanner discloses all of the claimed limitations above but fails to explicitly disclose that the proximal end of the blood marking lumen is a hole or outlet port; where fluid can flow out.

However, in an alternate embodiment, Kanner teaches that the proximal end of a blood marking lumen in the sheath comprises a port for observing the presence of blood due to the proximal end entering a vessel (Column 18, Lines 55-65; Column 19, Lines 1-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the proximal end of the first blood marking lumen to

include a hole or port as taught by Kanner in Figures 33 and 34, since such a modification provides an easy way for the user to observe the presence of blood and determine the position of the insertion instrument.

Regarding claim 14, Kanner discloses a first lumen that provides the fluid communication between the first distal hole and the first indicator; wherein the first lumen passes through the dilator (Ref 540; 520).

Regarding claims 15 and 16, Kanner discloses a second lumen that provides the fluid communication between the second distal hole and the second indicator; wherein the second lumen passes through the dilator (Column 8, Lines 37-60; Column 18, Lines 55-67; Column 19, Lines 1-31; wherein the additional passageway can be in the dilator or the sheath and would be similar to the first passageway connecting a distal hole and an indicator in order to indicate that the depth of the assembly is too far)

Regarding claim 51, Kanner discloses a third distal hole is located at the distal end of the vascular insertion assembly (Ref 675) and a third indicator is located at the proximal end of the vascular insertion assembly (Ref 688), the third distal hole being in fluid communication with the third indicator (Ref 689 B; Column 8, Lines 37-60; Column 18, Lines 55-67).

4. Claims 13, 21 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kanner et al. (US 6,767,356 B2)** in view of **Ginn et al. (US 6,626,918 B1)**.

Regarding claim 13, Kanner discloses all of the claims above including a first indicator and a second indicator but fails to explicitly disclose that at least one of the first

indicator or the second indicator is a hole defined in the sidewall of at least one of the dilator and insertion sheath.

However, Ginn teaches that it is well known in the art for a vascular insertion assembly to include an indicator defined as a hole in the sidewall of an insertion sheath which can communicate with a flush port or other back-bleed indicator in order to flush blood or other visible body fluid from the proximal side port (Column 6, Lines 19-35 and 59-67; Column 7, lines 1-6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify an indicator of Kanner to be a hole in the sidewall as taught by Ginn, since such a modification allows the port to be connected to a flush port which flushes blood or other visible body fluid from the proximal side port.

Regarding claim 21, Kanner discloses all of the claimed limitations above but fails to explicitly disclose a lumen having a first flow path and a second flow path; wherein the first flow path provides the fluid communication between the first distal hole and the first indicator; and the second flow path provides the fluid communication between the second distal hole and the second indicator.

However, Ginn teaches that it is well known in the art that vascular insertion assembly can include a lumen having a first flow path (Figure 17A, 651, 652, 653) and a second flow path (Figure 17A, (650, 648, 644); wherein the first flow path provides the fluid communication between the first distal hole and the first indicator (Figure 17A, 651, 652, 653); and the second flow path provides the fluid communication between the second distal hole and the second indicator (Figure 17A, (650), (648), (644); wherein

both the first flow path and the second flow path are within the central lumen of the sheath).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the vascular insertion assembly to have a lumen with first and second flow paths as taught by Ginn, since such a modification allows the interior instrument to rotate in order to allow some ports to be obstructed while allowing fluid to enter other ports.

Regarding claim 60, Kanner discloses all of the claimed limitations above including that the second inlet port and the second outlet port are in fluid communication by way of a lumen that passes through the insertion sheath but fails to explicitly disclose that that the first inlet port and the first outlet port can be in fluid communication by way of a lumen that passes through the insertion sheath.

However, Ginn teaches that it is well known in the art for indicators of a vascular insertion assembly to be in fluid communication by way of a lumen that passes through the insertion sheath (Figure 16A-B, (550), (648), (544)).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the first indicator and the first lumen to pass through the insertion sheath as taught by Figures 16A-B of Ginn, since such a modification makes it easier to distinguish between the two visual indicators.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include two indicators and two lumens passing through the insertion sheath, since it has been held that mere duplication of the essential

working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v Bemis Co.*, 193 USPQ 8.

Response to Arguments

Applicant's arguments filed January 6, 2010 have been fully considered but they are not persuasive.

- The Applicant argues that Kanner fails to explicitly disclose that the second distal hole is offset longitudinally in a proximal direction and circumferentially from the first distal hole. Additionally, Applicant argues that Kanner fails to explicitly disclose that the second proximal hole is in fluid communication with the second distal hole via a flow path positioned radially inward of an outer surface of the insertion sheath, since the lumens 689A, 689B are mounted to exterior surfaces of the insertion sheath, the dilator or both.

The Examiner respectfully disagrees. As shown in the rejection above, Kanner discloses that an additional blood marking passageway can be included proximal to the first blood marking passageway and can be located in the dilator or the distal end of the sheath and will include internal passageways or lumens for blood marking (Column 8I, Lines 37-59; wherein a blood marking passageway includes a distal hole, a proximal hole and an internal flow path connecting the holes). Additionally, in an alternate embodiment, Kanner teaches that it is well known in the art for vascular insertion assemblies to include a first passageway and a second passageway; wherein each passageway includes a distal hole and a proximal hole; wherein the first distal hole is

longitudinally and circumferentially spaced from the second hole (Figures 33 and 34, (674), (675)) and therefore the arguments are not persuasive.

- The Applicant argues that Kanner fails to disclose a distal hole that is open for fluid flow "only after being positioned distally beyond the distal end of the insertion sheath" as claimed.

The Examiner respectfully disagrees. As shown in Figure 20A of Kanner, the dilator includes a distal hole that is open for fluid flow only after the distal end of the dilator including the distal hole is positioned distally beyond the distal end of the insertion sheath and is inserted into the vessel and therefore the arguments are not persuasive.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIN COLELLO whose telephone number is (571)270-3212. The examiner can normally be reached on M-F: 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. C./
Examiner, Art Unit 3734

/Todd E Manahan/
Supervisory Patent Examiner, Art Unit 3734